

ESTABLISHED IN 1861

# THE AMERICAN BEE JOURNAL

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**Prof. Cook**, writing from Claremont, Calif., Nov. 20, says this:

We are having lovely weather. My bees have gathered quite a little honey this fall—mostly from the pepper-trees. This is a lovely country. A. J. COOK.

**A Tremendous Honey-Yield.**—“Gleanings” tells us of an Australian bee-keeper who, in the season of 1891-92, “started in spring with 63 colonies, increased to 120, and extracted a little over 48,000 pounds of honey—an average of 750 pounds, spring count.” The bees were “Italians and hybrids, in 20-frame ‘long-idea’ hives.” But the honey season in Australia lasts almost a whole year. It’s a fine yield, just the same.

**The Amateur Bee-Keeper** is the name of a neat 64-page pamphlet, 4x7 inches in size. It is written by that practical Missouri bee-keeper, Mr. J. W. Rouse, and published by the Leahy Mfg. Co. It should be read by every bee-keeper, whether an amateur or not. A new and second edition has just been issued, the first 1,000 copies being disposed of in only two years. It is nicely and fully illustrated. Price, post-paid, 25 cents; or clubbed with the “American Bee Journal” for a year—both, \$1.15.

**Nebraska Apiarian Exhibit**, at the State Fair in September, was as usual a prominent feature of the annual show. Mr. E. Whitcomb was in charge, which, of course, from the very start, insured a successful exhibit. A Nebraska report of the Fair said that the apiary department was ornamented this year by some beautiful work in beeswax by Mrs. Whitcomb. One of the most handsome designs consisted of a lyre with a bunch of flowers at the base. She exhibited a basket of wax flowers, flowers made of birds’ eggs, statuary and other pieces nicely executed.

William James, of Pleasant Hill, showed a miniature house made by bees on a framework placed in the hive.

Ernest Bessey and Winnie Stilson exhibited large collections of honey-producing plants.

August Davidson, of Omaha, S. A. Smith, of Gage county, Stilson & Son, of York, and Superintendent Whitcomb, all had large exhibits, considering the unfavorable season for honey-producing in that State.

**Lots of Honey** will be consumed by Chicago people the coming winter. There are quite a number of bee-keeping honey-sellers in town now, and they all know how to dispose of honey. Mr. Byron Walker, the “tall sycamore” bee-man of Michigan, came last week, and he will put thousands of pounds of nice honey in the grocery stores.

Then we understand that Mr. F. Grabbe—once a part owner of the “American Bee Journal”—has opened a store on the west side of the city, and is wholesaling honey at a fair price.

Mr. H. F. Moore is here—a young lawyer who thought he’d leave the old Ohio farm

some six years ago, and try his hand at city life. Well, he has practically put himself through a Chicago law school by selling honey. He has sold at retail as high as \$21 worth to a single wealthy family. He finds no difficulty in getting 75 cents for a Mason quart jar of honey.

Now, why cannot other cities and towns be worked in the same way? We believe they can. They ought to be, for city people are longing for good honey, and beekeepers themselves are the ones that should supply it.

Mr. Walker's own crop this year amounted to over 20,000 pounds, from 350 colonies in seven different yards. He has not failed to get a good crop of honey in 18 years. And every fall we look for him in Chicago to sell his honey himself, just as much as we expect to see the birds on their annual flight to the summerland of the South.

There's money in pure honey, but it needs to be gotten out by personal hard work. Try it and see for yourself.

#### **Hasty and the Kissing Habit.**

The hints on kissing, given by Dr. Peiro, on page 364, seem to have aroused Bro. Hasty, for in the October "Review" he comments thus on the subject:

Mercy, doesn't Dr. Peiro, of the "American Bee Journal," go for the kissing habit! Sets his face against it, as it were. Had we only plenty of Dr. Peiros an anti-kissing reform would sweep over the country equal to that which in some former age must have swept over Japan. There it is a very rare thing for a mother to kiss her own babe. Who knows but what the Prohibition party is already being organized in secret? To arms! to arms!! it's a coming. "I know not what course others may take, but as for me, give—" no—let her come.

**That Young Editor** in the office of "Gleanings" is beginning to "call names." Yes, sir, it's a fact. "Ernest" called us "a punster" right in print! He did, "by George!" and we're going to tell his pa, if he don't quit calling us names. So we will, the big, overgrown Root-let, that he is!

#### **That Beeville Bee-Meeting—**

don't forget it. Dec. 27 and 28 is the time. Mrs. Atchley's home is the place—Beeville, Bee Co., Tex. Better go if you can. Big preparations are being made. A good and profitable time is sure to result.

#### **Smoker Fuel—Robber Bees.**

Mr. E. France, of Platteville, Wis., in "Gleanings" for Nov. 1, says this about fuel for smokers, and how he stops robbing among bees:

After trying about all the different kinds recommended, we have settled down to straw and tobacco-stems—about half of each. We get the tobacco-stems at the cigar-factories. They cost nothing—in fact, we haul them on the place for fertilizers. The factory men are glad to have them taken away. Straw and tobacco-stems make plenty of smoke, hold fire well, and the tobacco just takes the fight right out of the bees.

We have never failed to stop the worst case of robbing we ever had, providing the colony being robbed was strong enough to be worth saving. This fall, in taking off the three stories one morning, I worked a little too long; and as I smoked the bees down with tobacco, I got one colony pretty drunk. Like other drunken beasts they could not defend themselves. It happened that I went to town after working with the bees, and was gone two hours. When I got home the yard was terribly excited, all trying to find where the honey was. The bees were swarming about one quadruple hive, and were tearing away at three of the colonies in the hive just as fast as they could get in and out.

In a case of that kind, something must be done, and done quickly, if we save the colonies that are being robbed. I had a large asparagus-bed. I took my scythe and cut a couple of armfuls and banked up the hive-entrance with the tops, and then took a sprinkler and wet the tops of the asparagus with cold water, and kept it wet for an hour. By that time the robbers had quit trying to get in. I left them banked up for another hour, and then took away the asparagus-tops. Then the robbing was done, and the robbers never offered to trouble them again. I examined the robbed colonies about sundown the next day, and found that fully half of their honey had been taken out of their combs, so I exchanged their honey-combs for full ones, and now they are all right.

I have fought robbers in this way a good many times, and always with success. They cannot get in through wet stuff. The bees belonging there think it is a wet time, and stay at home. In the spring, before we get the asparagus-tops, I use straw. It is not so good, but will do.

**One Enemy** is just one too many. But it is always preferable to stand up for the right all alone, than to step down to the wrong with the majority.

**A B C of Bee-Culture**—just see the magnificent offers on page 707. Every one of our subscribers can now have a copy of that splendid book.

**Two Queens in a Hive.**—We have received from several of our good friends and subscribers a clipping which was originally published in a London newspaper, giving an account of two queen-bees keeping house *together* during an apiarian exhibition in Vienna, Austria. It seems that Bro. Root's attention has also been called to the statement about the two queens, for in "Gleanings" we find this about it:

The statement is going the rounds of the press, as though it were something positively wonderful, and never before heard of, to the effect that two queens were *actually* living together in harmony, in an observatory hive on exhibition at an apicultural show in Vienna, and that thousands of visitors can attest the proof of it. We don't doubt it at all. This same clipping desires bee-journals to take particular notice of it. Of course, our readers know that it is not an extraordinary thing to find two queens in a hive, both performing their regular duties.

But it's not surprising that the uninitiated public should be surprised about such things. Why, just a few weeks ago, a city gentleman called on us, and wanted to get some one-pound sections, saying that a bee-keeping friend of his in the country wanted to take off some honey and put it into the "little boxes!" He thought that the honey was cut out of the hive and then put into the sections! When we explained how things are done by the practical bee-keeper, he said: "Well, that shows how little I know about bees!"

The St. Joseph, Mo., "Herald" also copied the wonderful (!) article in question, and it came under the notice of Emerson T. Abbott, the President of the North American Bee-Keeper's Association, who, as all know, lives in St. Joseph. He took the trouble to reply to it in the same paper, on Nov. 16, and here is a portion of his remarks:

The discovery is that Prof. Gatter, of Simmering, exhibited a "thriving hive the members of which are governed conjointly by two queens," and that the "two monarchs get along most satisfactorily."

The writer further states that the "members of the Vienna Apicultural Society are proud to think that no such extraordinary spectacle as this was ever witnessed (?) or recorded in the history of bees." And to make the matter more sensational, and to give color to the statement, we are told that the eminent apiarist, Dr. Dzierzon, "sat for hours at a stretch watching the two queens."

It is too bad to make the old man spend

so much time watching a very ordinary affair.


As the article is credited to a London paper, it is to be assumed that this would-be sensational scribbler lives under a monarchical government, and on this ground may be excused for dealing so lavishly in phrases which are peculiar to such a government.


There is no such government, however, in a bee-hive. The queen, so-called, is not a queen at all in the sense that she rules the hive. She is simply the mother-bee, and her principal duty is to lay eggs. She does this work to perfection, as she sometimes lays 2,000 or 3,000 eggs a day during the time honey is coming in rapidly.

Every man who has any practical knowledge of the economy of the bee-hive knows there is no such thing as government in it. The truth of the matter is, the bees do not need any boss, as every bee has a mind to work, and each bee knows her business, and does it without any whining. Men might learn a lesson from the bees in this respect. There is more reason for believing that the so-called "queen" is subject to the will of the worker-bees than there is for thinking that she has anything to do with the government of the colony. A monarchist will find no support for his theory in a bee-hive. Neither is there anything strange about finding two queens in a hive, as this frequently occurs under certain conditions, and the fact has been witnessed and stated a great many times before this fruitful writer with a very vivid imagination spread it broadcast in the world.

I hope you will excuse me for taking so much of your space. My only excuse for so doing is, that I think it better for those who may not have the opportunity of knowing the truth to have the facts plainly stated by one who from actual experience should know them.

EMERSON T. ABBOTT.

 The food fed to all larvæ, up to the time they are 36 hours old, is exactly the same, whether the larvæ are designated for drones, queens, or workers.—*Doolittle*.

 **Remarkable Fall for Bees.**—Mr. B. Taylor, of Forestville, Minn., who conducts the apiarian department in the "Farm, Stock and Home," had the following in the number of that paper for Nov. 15:

In our 39 years of bee-keeping in Minnesota, we have never known a year in which the bees worked so late in the fall as this. One fall, 20 years or more ago, the bees gathered considerable honey in the first week of October. We had taken all the supers for surplus off, except on a few hives, and we were called from home a week, and on returning was surprised to find that there had been a nice lot of honey stored in the few supers that remained

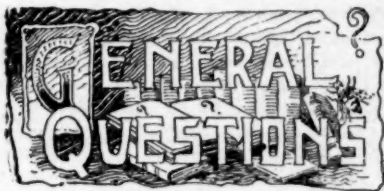


upon the hives. We resolved to watch for October flows thereafter, and not lose the honey again through neglect. But no legitimate work has been done again until this fall. At the Forestville apiary, our bees have been bringing in pollen freely on all fine days. Up to Oct. 26 dandelions were the source from which it came, many meadows in this vicinity being yellow with the blossoms. The consequence has been that brood-rearing has been kept up unusually late, and the hives being heavy with honey, we regard the colonies as being in the best condition for safe wintering that they have been in for years.

We feared that the white clover was mostly killed out by last summer's terrible drouth, and that the outlook for next year was anything but promising, but in this again we are most pleasantly disappointed. The high temperature and timely showers have started the seemingly dead clover in fine shape, and the pastures are greener now than at any time in our recollection. This promises well for the honey crop of 1895, and every bee-keeper should take especial care of each colony, so that we may all rejoice together over a big honey crop next season. The saying that all rules have their exceptions has had a new illustration with us this season—we extract unfinished sections to get the empty combs for next season's use. In the past we have cured such sections the same as comb honey before extracting, in order that the extracted honey might have all the oily richness of comb honey, but this fall we found it nearly impossible to extract sections so cured.

This dry summer had made an exception to the common rule, the honey had become almost like wax, and we were compelled to melt a share of our combs, as it was impossible to throw the honey out without tearing them to pieces. This was a great loss, as prepared combs are the great means of increasing the white honey crop, and we have proved that a section filled with empty comb, if properly prepared and used, is worth more than half the value of finished sections.

We also run an out-yard of 40 colonies this year for extracting; the colonies were tiered up to give plenty of storage-room, and no supers were taken off until after Oct. 1. The yield was fair, but neither would this honey extract, even after we had steamed the combs until they were so soft as to part from the top-bars. In order to get enough honey to pay expenses and keep things running until another year, we had to melt the combs in a steam box, and destroy a large quantity of our fine extracting-combs. We have a quantity of the filled supers that we shall put in a warm room and keep for feeding next spring, but using 15-cent white honey for feeding, when we could supply equally good sugar syrup for 5 cents is very poor policy. The lesson to be learned from all this work and loss is to watch on dry, hot seasons and not let the honey get so thick we cannot extract it.



ANSWERED BY

**DR. C. C. MILLER,**

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—Ed.

#### Large Colony—Queen Mating.

On the 25th of March one of my neighbors found a basswood tree 4 feet in diameter, with a swarm of bees in, about 45 feet from the ground. They cut the tree down, and it fell upon several other small trees, mostly maple, and lodged about 5 feet before striking the ground; then the bees came out by thousands and took possession of the forest, until the next morning at daylight, when two men went with a cross-cut saw and sawed off about 4½ feet. They sawed too close to the bees on top, and cut away about 40 pounds of very nice white clover honey.

The cavity was 18 inches in diameter at the base, and 14 inches in diameter at the top. I saw the log hive, and think there were at least 50 quarts of bees, and 150 pounds of honey in the log hive. They were black bees, and tinged with a little yellow. What were they worth? I offered the man \$10 for them. Could I have afforded to give more?

How could they have been divided? Could a person have driven out about 8 quarts of bees with smoke on comb foundation, and make 5 or 6 good colonies, by buying good, fertile queens from the South, without destroying the original colony?

Why does the queen-bee come out in the open air to meet a drone, when there are drones in the same hive?

Caledonia, Wis.

W. K.

ANSWERS.—A colony of 50 quarts of bees with 150 pounds of honey, or 190 pounds before the 40 pounds were cut away, is something rather unusual; \$10

would be a low price for them. A little figuring will help us in deciding their value. In Root's "A B C of Bee-Culture," a quart of bees is estimated at about 3,200, and at that rate 50 quarts would be about 160,000. Bees are sold by the pound rather than by the quart, and at 5,000 to the pound, 160,000 would make 32 pounds. So early in the season a pound of bees ought to be easily worth a dollar, making 32 pounds worth \$32. One hundred and fifty pounds of honey at 8 cents will bring \$12. That makes bees and honey together bring \$44.

So you see, if you paid only \$10 for the contents of the log, and sold out at \$44.00, you would have good pay for the trouble of getting out the honey and shipping the bees. It is quite possible, however, that there is some mistake in the estimate both of bees and honey.

On page 276 of the first volume of the "American Bee Journal," you will find that Dr. Donhoff shows that under the most favorable circumstances, even allowing a queen to lay 3,000 eggs every day continuously, the *maximum* population possible in one colony as the progeny of one queen is 63,000. But no such number as this could be expected to be present in spring.

I doubt the wisdom of your trying to divide as you propose. On the whole, perhaps you could adopt no better management than to leave the colony in the log till it sent out a swarm. Then if it is so very strong it will send out a second and perhaps a third swarm. 21 days after the issuing of the first swarm would be a good time to transfer the combs to a movable-frame hive. Other plans might be followed which will suggest themselves, if you read up thoroughly some standard text-book on bee-keeping.

With regard to the mating of the queen in the open air, possibly it may be sufficient to say that she is created with an instinct that impels her to do so. Several cases have been reported, at least in some of the foreign journals, in

which it was asserted that mating took place in the hive. Even if there be no mistake in these cases, they must certainly be regarded as very exceptional.

## CONVENTION DIRECTORY.

### Time and place of meeting.

1894.  
Dec. 10.—W. Washington, at Tacoma.  
G. D. Littooy, Sec., Tacoma, Wash.  
Dec. 18, 19.—Northern Illinois, at Rockford, Ill.  
B. Kennedy, Sec., New Milford, Ill.  
Dec. 26, 27.—Eastern Iowa, at Anamosa, Iowa  
Frank Coverdale, Sec., Welton, Iowa.  
Dec. 27, 28.—Texas State, at Beeville, Tex.  
Mrs. Jennie Atchley, Beeville, Tex.  
1895.  
Jan. 2, 3.—Michigan State, at Detroit, Mich.  
W. Z. Hutchinson, Sec., Flint, Mich.  
Jan. 9.—Indiana State, at Indianapolis, Ind.  
Walter S. Pouder, Pres., Indianapolis, Ind.  
Jan. 21, 22.—Colorado State, at Denver, Colo.  
H. Knight, Sec., Littleton, Colo.  
Jan. 22-24.—Ontario, at Stratford, Ont.  
W. Couse, Sec., Streetville, Ont.  
Jan. 28.—Venango Co., at Franklin, Pa.  
C. S. Pizer, Sec., Franklin, Pa.  
Jan. 30, 31.—Vermont, at Middlebury, Vt.  
H. W. Scott, Sec., Barre, Vt.  
Feb. 8, 9.—Wisconsin, at Madison, Wis.  
J. W. Vance, Cor. Sec., Madison, Wis.  
—, —.—North American, at Toronto, Can.  
Frank Benton, Sec., U. S. Dept. Agriculture.  
Washington, D. C.

**In order to have this table complete. Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.**

### North American Bee-Keepers' Association

#### OFFICERS FOR 1895.

PRES.—R. F. Holtermann.....Brantford, Ont.  
VICE-PRES.—L. D. Stilson.....York, Nebr.  
SECRETARY.—W. Z. Hutchinson.....Flint, Mich.  
TREASURER.—J. T. Calvert.....Medina, Ohio.

### National Bee-Keepers' Union.

PRESIDENT—HON. R. L. Taylor..Lapeer, Mich.  
GEN'L MANAGER—T. G. Newman, Chicago, Ill.  
147 South Western Avenue.

**The Novelty Pocket-Knife** is worth having. Mr. A. G. Amos, of New York, says this about it: "The Novelty" pocket-knife which I received with the AMERICAN BEE JOURNAL arrived all O. K., and it is a dandy." Better get one yourself, and then you will know what a "dandy" thing it is. See page 736 for advertising offer.



CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

## PROFITABLE BEE-KEEPING.

Lesson No. 14.

(Continued from page 619.)

### HOW TO GET ALL WHITE HONEY.

Now I will be glad if my Southern readers will pay strict attention to this lesson, *especially* how to get nice, clear, white comb honey.

First, I will say that we *must* have nice, clean sections, and use the best and thinnest foundation for starters. But the greatest trouble lies with those bee-keepers that do not study their honey-plants, and let their sections remain in the hives when red or undesirable honey is coming in, and the bees will have some dark honey along with the white, and all is spoiled. Now, if you have a crop of white honey during the season, you should know exactly the time, as near as possible, when to look for it. Have your bees in condition to gather it, and take all undesirable honey off, if there should be any, and have the supers ready to put on the moment the white honey begins to come in; and you can, if you like, use some dark sections for bait in the center of the super, then, when well started, take it out and put in new ones. But by all means, do not let your dark honey get mixed with the light. If you will do as I have directed, you will be pleased to find you can get white honey in the South as well as anywhere, and just as fine flavored honey.

I have had it intimated to me that comb honey in the South is too tender to ship, etc. Now, friends, I would not like to have you think this. I cannot see any difference in Northern and Southern honey as regards its shipping qualities. Of course, during the very warm weather here our honey is very tender, but any honey would be tender

under the same conditions. But I assure you that you can produce and ship comb honey in the South as well as anywhere.

The greatest trouble we have here with comb honey is the moth. I am going to have made a wire-cloth honey-house, large enough to hold 20,000 pounds. I mean by a "wire-cloth house," that I will make the sides nearly all wire-cloth. Make it ant and moth proof.

And then, in this dry country, I notice that the moth does not bother combs that are well ventilated, like those shut up close. The wire-cloth sides will allow the wind to circulate freely through the house, and keep the dampness all out. I have some honey in a small wire-house now, and it is keeping all right.

I have always delighted in producing section honey since I first tried it, and I expect to produce and ship it in the future. I am anxious for Southern bee-keepers to put comb honey—fine section honey—on the markets of the world, and let people know we can produce something except "Southern strained honey." I tell you, friends, we of the South have been too careless about getting up our honey for market, and we must not sleep over our rights any longer, but let's go to work and produce comb honey by the carload, as we call it. Let's have all our white honey in the sections, and extract the darker grades, and I believe that if we will be up and doing, and try ourselves, we can add to our list fine comb honey by the carload.

The reason I have gone over these grounds so carefully, and repeated some words about it, is because we are away behind on section honey, and we should not be. Now some, or all of you, try some section honey this year, and see if you are not pleased.

### SMOKING CAGED BEES AND QUEENS.

When queens are caged, and the bees with them show fight, and you wish to smoke them, better let the smoke pass over or through your fingers, especially if you use a direct-draft smoker, as you may burn the queen and bees to death in a twinkling. I have done the like, and to keep you from doing the same, I tell you how to avoid it, for if the smoke burns your fingers, you may know it will injure the bees. JENNIE ATCHLEY.

### Some Questions About Texas.

MRS. ATCHLEY:—I am a bee-keeper, and having sold my place and apiary

here, and going to leave this part of the country, I take the liberty to ask you some questions about Texas.

In the first place, are people troubled with liver disease? I am troubled with it here, and want to get where I will not be. Is there any business that any one can engage in, besides bee-keeping, to make a living for a large family? Is there any work that boys and girls can get to earn anything? When is the best time to come there from this Northern climate?

A. EASTMAN.

Union, Ills.

I will answer your questions as best I can. I do not think there is any liver trouble here among the natives, and, in fact, the sickness, as a rule (what there is), we find is among those that come here, as it takes a year to get acclimated. But the little puny sick-spells while you are becoming acclimated are a mere trifle, and some do not have any, and others pay no attention to it.

As to work here, I am not posted, as my whole time is taken up with my bee-business. I have but little time to learn about other lines of work. I can only say that I have not seen anybody hunting work lately, and every one seems busy. I believe our little town now has six new brick buildings going up. Your boys and girls can get to pick cotton from July to December, as farmers usually raise three to four times as much cotton as they can gather. I am at a loss to tell you when is the best time to come, but if I were coming I would start whenever I got ready. It will not make any difference that I know of.

JENNIE ATCHLEY.

### Mr. Hasty and the Snake Story.

I see Bro. Hasty has "held me up" on that snake story. Now, Bro. Hasty, we have no time for foolishness, and when I put *anything* in "In Sunny Southland," I mean it for the truth, and nothing but the truth. When I read your kind criticisms in last "Review," I could not help laughing a little. But, to be sure I was right this time, I had the surveyor, who was here a few days ago, measure that bee-tree. The cavity where the bees were is about 5x6 inches, and not as large as a 6-inch candy jar. Well, the boys, when interviewed about the snake, said that it was from 7 to 9 feet long, and, worse still, was a "cannibal snake," for it had swallowed another snake over two feet long, and

had evidently housed up for the winter to live upon its brother snake. I know this is a big looking snake-story, and it ought to be, as it was a big snake. The shell of the tree was thin.

JENNIE ATCHLEY.



### A Large vs. a Small Apiary, and the Kind of Hive.

**Query 951.**—1. If one man does all the work of an apiary, is he likely to make more by keeping a large number of colonies and performing only the absolutely essential operations, or by keeping a smaller number and making sure that each is in the best condition?

2. What type of hive would you recommend for the former work, to a man who has as yet bought none?

3. What for the latter?—Colo.

1. Yes. 2 and 3. Ten-frame Langstroth.—S. I. FREEBORN.

1. Perhaps a middle ground might be best. 2 and 3. The dovetailed might do.—C. C. MILLER.

1. The small number, and do everything thoroughly. 2 and 3. Plain, movable frame.—B. TAYLOR.

1. I would adopt the latter plan. 2. The 10-frame Langstroth Simplicity suits me.—J. M. HAMBAUGH.

If you keep bees at all, keep them right, keep no more than you can well, and in good order.—E. FRANCE.

1. I think a large number. 2 and 3. In either case the regular Langstroth or the New Heddon.—A. J. COOK.

1. Keep what you can keep well. 2 and 3. The kind of hive spoken of in Query 950, last week.—P. H. ELWOOD.

1. By keeping a large number. 2. A 10-frame Langstroth chaff hive. 3. Perhaps an 8-frame would suit best in this case.—W. G. LARRABEE.

1. My impression is, that a man should only run as many colonies as he can keep in the best condition. I don't



believe a "slipshod" apiary will pay. 2. The regular "Langstroth hive." 3. The same hive; in fact, I think there is no better hive in use, and I am backed up in that opinion by the great majority who use them.—J. E. POND.

1. The smaller number will give the best results, taking a series of years into consideration. 2 and 3. The Gallup or 10-frame Langstroth.—G. M. DOOLITTLE.

1. We prefer keeping more bees and doing only the essential; but there is money in it both ways. 2 and 3. Use a large hive by all means, and in either case.—DADANT & SON.

1. The smaller number, as he will have less outlay. 2. The Langstroth hive, two-story, and run for extracted honey. 3. The Langstroth 8-frame hive.—MRS. L. HARRISON.

1. It never pays to undertake more than one can do well at any thing. 2 and 3. An 8-frame Langstroth hive for any one, and in Colorado they should be chaff hives.—MRS. J. N. HEATER.

1. Large number, but not to overstock his field. But to handle a large number he must be a skillful apiarist, and if skillful he will not neglect even a large number. 2. A standard size.—EUGENE SECOR.

I have neither time nor space to write an article or a book on the best method of bee-keeping. So much depends upon the man, and upon other things, that definite answers cannot be given.—M. MAHIN.

1. It all depends upon the man and his method. 2. The standard Langstroth hive, because you will have no difficulty in getting supplies, and less trouble in disposing of hives in the end.—H. D. CUTTING.

1. He will realize more profit by keeping no more colonies than he can properly manage, and his location will justify. 2. A hive of 9 or 10 frames—easy to handle—well arranged for surplus.—J. P. H. BROWN.

1. That depends very much upon the man and the location. 2. I believe generally the man keeping the smaller number on improved methods would be best. 2. One containing not over 1,600 inches, inside measure.—C. H. DIBBERN.

1. That would depend upon the habits and taste of the man. I would say, get between your propositions, and neither neglect nor do too much extra work. 2 and 3. Standard Langstroth, under all conditions.—G. W. DEMAREE.

1. The operator alone can answer this question. Keep only the number you can well care for. In other words, you must determine the matter yourself. (Your judgment and common-sense were given for that purpose).—W. M. BARNUM.

1. That depends upon the man, the locality, the kind of hive, and several other considerations. 2. In either case, the hive which can be manipulated to perform all necessary operations with the least amount of labor.—J. A. GREEN.

1. I believe it is like everything else—have no more than you can attend well. 2 and 3. I think the "Improved Langstroth Simplicity" is the best hive for any purpose. It is a good deal as any one is accustomed to a particular hive, I suppose.—JAS. A. STONE.

1. I would keep a smaller number, as two cows half fed do not give as much or as good milk as one well fed. See? 2 and 3. I would use some hive that would take a frame the size of the Langstroth, say 8 or 10 frames; either size is good.—MRS. JENNIE ATCHLEY.

1. The bee-keeper should keep as many colonies as his locality will profitably support. 2. The Nonpareil hive for comb honey is superior to all others, whether few or many are used, as it is suited to any kind of management or season, whether with large or small brood-chambers.—G. L. TINKER.

1. It always pays to do a little well, than to half do a good deal. 2. I do not know that it makes much difference about the hive, if you do not intend to get the most out of your bees. Perhaps they would give you the least trouble if you would put them in a 10-bushel store-box. 3. The one I sell, of course.—EMERSON T. ABBOTT.

1. Making sure that each is in the best condition! You can't do it! Colonies will differ in condition. If you mean the best condition reasonably possible, then that would require but little additional work, and is as essential as anything. Keep the number of colonies that will produce the most surplus from your field, and one man should easily do the work required, and have more than half his time to spare. 2 and 3. The Heddon sectional hive.—R. L. TAYLOR.

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## OBSERVATIONS AND EXPERIMENTS.

**Toronto Island—Queen-Rearing and Mating—Other Interesting Apiarian Matters.**

BY JOHN M'ARTHUR.

(Continued from page 689.)

In 1890, queen-rearing was commenced on the island, and has been carried on in a small way, experimenting and observing closely the effects of in-breeding, also the effects of drones from laying workers, which will be referred to further on. Had I known the labor and expense, and attending to three apiaries besides, single-handed, I would have let the business of queen-rearing drop, except what was wanted in my own yards.

I imported some breeders, and can conscientiously say, that if such be a fair sample of our breeders that thousands are reared from, it will be a *long, long* time before much improvement takes place in our race of bees. I am afraid we are being gulled in this queen-business. No doubt they can be reared in great numbers, but this will cease, because there is a great amount of unnatural or mechanical work about the business. We have only to look at the queens—they are shrivelled, narrow, tapering bits of things. They don't lay worth a rap, and are short-lived. They are not the fine, long, broad, deep-bodied and curved-back queens we find produced under natural conditions—ones that last four or five years. These are the sort that I want to purchase and produce. Like produces like. Fine, large queens will produce fine, large bees and drones, and beauty combined. "A thing of beauty is a joy forever," I think I hear some one say. "Handsome is that handsome does." You can get that, too. Never sacrifice the useful to establish the beautiful.

Enough has been said and done on this line to convince me that our isolation is most complete, and the nearest approach to control the mating of our queens has been reached. Queen-rearing can be conducted with pleasure and profit. There is an assurance or confidence that what is done is right, and no mistakes. Queens cannot be reared on the island so cheaply as on the main land. The loss so far in mating has been heavy, owing, I believe, to so much water being present. Bays cut into the island, with several large lagoons.

**MATING OF DRONE AND QUEEN.**—A great many experts believe that queen and drone, when coupled, fall to the ground. In fact, there are instances on record of such being the case. In 1882 I saw one drop, but a chicken was smarter than I. I perceived the chicken, and caught both. The queen was dead. There was evidence of mating.

The year following, in the month of September, I found a pair of yellow wasps

coupled. They were on a window-blind. I watched their movements for some time, and thought there might be some light obtained on this subject from them. They took wing and flew away. The male seemed to have the worst of it. He was shrivelled up, and not much of him remained.

Last season I had the pleasure of seeing what I considered was the union of three queens. It certainly was a jollification. The drones assembled, forming one confused and separate body. They could be seen distinctly tearing and striking at one another, often coming to close quarters, several getting hold of one another, and could be seen coming nearly to the ground, breaking their hold and rising again to renew the attack. We have been taught to look upon them as quiet, harmless individuals. They have the faculty of combativeness, and use it with good effect when occasion requires. They fight desperately for a queen. It seems to me the queen is "rounded up" (cow-boy fashion) by the drones and brought to close quarters. When coupled they can be seen bearing themselves away on the wing, the combatants scattering. One of those seen mated dropped in a lagoon in front of the bee-yard. It had shallow water with lots of rushes. I waded in and found her clinging to a rush, apparently suffering pain, as she was rubbing her sides with her two hind legs. You will often see a queen go through the same performance when stung, and also the fourth or fifth day after mating, with this difference—you will often find the bees nibbling at the refuse of the drone's organs, which she is seeking to discharge. This queen was mated, for the evidence was very marked, a portion of the male organ being visible, which she seemed to be anxious to reach with her legs. I gave her ten minutes to straighten up, and locate her hive. She seemed prostrate, and unable to fly. To leave her would be a risk, so I cut the rush and took her to a hive that had lost their queen the day previous. She was accepted without any trouble, and proved a first-class queen.

Whether all drop in mating is a question that needs confirming, which I hope is not the case. Taking my last year's loss into account, it looks as if it might be so.

It is very interesting to watch the queens in their mating excursions, and note the difference in time of mating. Some are mated on their first trip. This class of queens appear not to be the strongest. Some will fly every bright day and escape the drones. When inside pressure is brought to bear upon them, they will after 21 days, if fed heavily so as to excite egg-production, become drone-layers. Others, when long in mating, get balled, sometimes escape and are mated, and in returning get balled again. This is a rare occurrence—very rare indeed—for a colony to reject a newly-mated queen. This is like a wedding in the human family, or the arrival of a first-born—an event of great rejoicing. Joy and gladness seems to be infused into every worker-bee, at the safe arrival of their newly-mated queen. Contrast the difference of a colony whose queen is long in returning. All is tumult and disorder. Let her put in an appearance, or present them with another queen, and the whole colony has the tidings as if by magic. Some are very slow at leaving the hive, cold and indifferent, and remain so for more than 30 days, get mated after that, and do well. This is not in harmony with the theory of some, but it is the case, nevertheless.

Experience leads me to say that the largest queens, and to all appearances the strongest, are as a rule the most difficult to mate. There is no doubt the strongest and fittest drones succeed in copulating, therefore no bad results can arise from in-and-in breeding. It is desirable that in-breeding should be resorted to in order to make the characteristics indelible. Had this not been done in the case of our domestic animals, the effects of a cross on any inferior stock would scarcely be recognizable. I say, then, that in-and-in breeding among our bees is necessary. After all, it is natural selection, and no injury can result from this source.

Another peculiarity was observed in the flight of the drones when circling around the bee-yard—nothing out of the ordinary was observed. On Aug. 20 the atmosphere was a little smoky, the sun shone, and drones flew well. The wind was west, and their movements were to the east. When on long excursions they flew backward with a circular or wabbling motion, with their head to the wind. Being a fine day for observing their movements, I followed their course for half a mile. They could be seen wabbling away over the blue waters of Lake Ontario, probably on a visit to Uncle Sam's domains. As a rule they fly with the wind. This is a fine place to make observations, there being nothing to mar the vision.

**DRONES FROM LAYING WORKERS.**—I also made some experiments with drones from laying workers, two yellow queens being mated, and as yet I cannot see any difference in the stock produced so far, but we had probably better wait and see how they come out later, as it was the last experiment tried. One was mated Oct. 12, and laid eggs and produced stock about half and half. The drones were black. They were hatched in drone-cells, and were fine, large drones. The other queen laid eggs, but was put into winter quarters before the brood hatched. I put several queens into the cellar that were not fertile, and proposed putting their drones on the island early in spring, and have no doubt they will be able to reproduce those yellow drones, as I found some on the bottom of the hives last winter in the cellar.

**BREEDING FOR COLOR.**—Some prominent breeders profess to be able to make steel-gray Carniolans yellow by in-breeding, in four generations. It is an established fact that like produces like, or a similarity. You may as well tell me that you can take the negro and do the same thing—I won't believe you—or the Jew. The Jews in Poland, in Australia, in London, and in New York, are the same. How is this? Because there is no mingling of his organization with that of another. Permanence of race is established, and a thoroughbred. The same I think can be said of the Carniolan race of bees. We admit freaks in nature, of which there are many on record, and many we have seen—such as Albinos. They are to be found in every race; and red has often been produced after 50 years of straight breeding from solid blacks, and black from solid reds. I once saw a light bay colt produced with a black back and sides, the result of the servant throwing his black overcoat over the mother's back at conception, which somewhat frightened her; and a neighbor of mine has in his possession a perfectly white robin which was bred in his garden last season.

Many more could be given which I have seen, but this will suffice. These are incidentals. Climate, food, and habit are the principal causes of variation which we have in any way under our control. We all know that changes produced under those conditions are slow, but accurate. Any who profess to be able to produce those sudden changes of color in any race or class of animated nature by in-breeding must be endowed with supernatural power. We can refer to Jacob of old. Jacob was a scientist of ancient repute, and his theory is practiced by some to-day with success. Having already referred to impressions at the time of conception, it would be needless to say, although its effects are visible among some of our domestics, we have not got it down so fine as to apply it to changing color of queens.



### INTRODUCTION OF QUEENS.

BY GEO. W. BRODBECK.

In all likelihood there is nothing connected with the bee-keeping industry that has resulted in so many disappointments to novices in particular, and even those

well versed in apiculture, as the introduction of queens. This is a subject that has been well digested, both theoretically and practically, but, aside from the hatching-brood method, all other methods have at times resulted in failures, and while the one I present may prove likewise, one year's demonstrated entire success tempts me to present it to the readers of the "American Bee Journal."

Self-introducing cages have modified some of the old-time difficulties, but unless one is well versed in the necessary conditions, it also has its drawbacks. The one and the chief cause of failure by the method of caging, is due to the different condition of things existing in the hive from that in the cage. Having occasion to introduce a valuable queen, I gave this subject more than usual consideration, and the thought presented was, why not produce the same condition of things in the hive that existed in the cage? So, suiting action to thought, late in the evening I placed the cage (a self-introducing cage) between two combs, closing the hive-entrance with wire-cloth for two days, and by this method, up to the present, I have as yet to score a single failure.

To the uninitiated I would advise taking the same precautions as one usually does with bees in confinement.

Los Angeles, Calif.



### HONEY-RESOURCES OF EAST TENNESSEE.

BY ADRIAN GETAZ.

The first honey, and perhaps the first pollen, are from the different kinds of maples growing along the streams, but seldom in the woods—generally in March, but sometimes earlier. In open winters, the blossoming of the maples may begin in January or February, a little at a time during every warm spell of weather, only to be frozen when the next cold wave arrives. In such cases, the bees can hardly get anything from the blossoms.

After that comes the peach trees, the latter part of March, but, like the maples, liable to open earlier, and only a few blossoms at a time if the weather is warm enough. In fact, there is not more than one year out of six or seven that the peach blossoms, or later the fruit, is not destroyed by the late frosts, at least partially. In April come the apple-tree blossoms. Those being later, they nearly always escape the frosts. These two constitute the bulk of our fruit trees; the other kinds are cultivated only to a small extent. The yield of nectar is probably as good as could be desired, but rains and cold days interfere considerably with the gathering, and if the hives are not well provisioned, feeding is often necessary.

With hardly an interruption, white clover begins; but the yield from it is meagre, owing partly to the poorness of the soil. However, its yield depends chiefly upon the weather. After a good rain it is good for a few days, and then decreases gradually to nothing until the next big shower starts it again. It goes on thus until sometime in July, or even later. But the yield diminishes as the season advances, as the rains can no more keep up with the evaporation from the ground.

A good deal has been written about the relation between the weather and the honey-flow, but nearly all the writers have overlooked the fact that the most essential condition is the presence of a sufficient amount of moisture in the ground. As the earth dries up gradually after the rain, the yield diminishes. The plants with short roots are giving way first, and later the larger ones; trees being the last to suffer, especially if a rainy winter has accumulated enough moisture in the depths of the ground.

During the latter part of May, and in June, we have honey-dew in abundance, or not at all. This in good seasons is the main source of our surplus. The honey



from it is amber, with a slight blackish shade. It has a peculiar, slightly-acid taste, characteristic of the Southern honeys. It is gathered, I think, chiefly from the hickories. Occasionally we have some at other times of the year. Occasionally, also, we have instead of honey-dew, some kind of dark, nauseating "bug-juice." While there is honey-dew, all other sources of nectar are neglected by the bees, except perhaps the sourwood; but the honey-dew has generally disappeared when the sourwoods disappear.

About the middle of May the tulip trees blossom. These are the heaviest yielders of nectar we have. Unfortunately they have been nearly all cut for lumber, and as they do not grow from the stumps, and do not blossom until quite large, we get little from them. In fact, I do not know of more than half a dozen trees within reach of my home apiary. The other apiary is better placed, being only  $1\frac{1}{2}$  miles from a tract of wood belonging to the county; the lumber of which has not been cut for several years. There are so few linden trees here that they are entirely out of consideration.

In June, we have the persimmon-trees and the wild grapes, both good yielders, but there is not enough of them to furnish much surplus.

About June 20, the sourwoods begin to blossom, lasting until the middle of July, and sometimes later. This is our surest yield, and also our best, or rather next best, to honey-dew, when there is honey-dew at all. The sourwood honey is perfectly limpid and thick, and unsurpassed in taste, having a delicious aromatic flavor, just strong enough to be good, without any acid or after-taste at all. It is very seldom obtained pure, nearly always mixed with honey-dew or persimmon. As to taste, the persimmon honey is not quite as good, though similar, and is amber instead of white. Sourwood honey never candies—at least it has that reputation.

After that, nothing in dry seasons, which is usually the case; or if it rains enough from minor sources to keep up brood-rearing until the fall flow. But I often have to feed during the latter part of August and the beginning of September.

With the middle of September begins the fall flow, chiefly from golden-rods and asters, and also to some extent from some other plants, all able to withstand considerable drouth. But sometimes it is too dry even for them, or the frosts come too early and cut off the flow. Only once in the last seven or eight years some surplus was obtained from fall blossoms, while feeding for winter has to be done, more or less, at least one year out of two.

The question has been often raised whether the golden-rods yield honey or not. Well, here, bees will work on golden-rod until the asters are open. In fact, bees will work on the blossoms that furnish the most nectar, to the exclusion of all others.

I have frequently to answer inquiries about the resources of East Tennessee in regard to bee-keeping; this is intended as an answer to all. It will apply to all the East Tennessee valley, at least in the main points. I must acknowledge, though, that the neighborhood of Knoxville, is one of the poorest in the valley. Other locations will be found that are better than this, either because the soil is better, or because the valuable kinds of trees have not yet been cut down so close. On the other hand, immense quantities of honey could be obtained in the mountains, where plenty of linden, tulip trees, sourwoods and wild flowers are yet to be found. But one who would go there, must be willing to put up with lack of good society, good means of communication, and other refinements of civilized life.

The most interesting part of the question is, How much do your bees yield? Well, "I don't know." I count an average yield in a good season, one super full (28 sections), or nearly full, and something done in the second super, from the parent colony; and about half that amount from the swarm—second swarms not allowed. If swarming is not restricted, no surplus need be expected. Occasionally

colonies that did not swarm, and did not take the swarming fever, have yielded 3 or 4, or even 5, supers. That is what has so strongly aroused my interest in the non-swarming question. I have not tried producing extracted honey, but it would probably have paid better, only I am something of a hobbyist or crank, and producing comb honey is one of my hobbies.

My next article will be on the management of bees in East Tennessee—or *my* management. Knoxville, Tenn.



### GUM CAMPHOR AND ANTS—A REPORT.

BY W. G. M. SHAFFER.

In a recent number of the "American Bee Journal" the editor asked for new kinks. I do not know whether the one I am going to give is new to all its readers. I have experienced such good results from its use in my apiary the past summer that I feel encouraged by the kind invitation of the editor to give it to the public.

Like many others, I have had considerable trouble with ants in the "Berkeley Queen Apiary," which is located on the south side of the North Mountain. One day, after looking over my honey in the honey-room, and after trying every method I could think of to keep the ants away, it occurred to me, why will not gum camphor do it? It will keep moths out of carpets and out of clothes. I immediately obtained a piece the size of a hulled walnut, and placed it on the crates of honey. In an hour I examined those crates of honey, and to use Dr. Miller's words, "It was all my fancy had painted"—not an ant to be seen.

I hope those who have been troubled in this way will try the above method and report through these columns. If you have an organ, place a piece of gum camphor under it, and the moths will never trouble the felt lining.

Bees in this part of the State have done well. I have one colony of Golden Italians, which has netted me \$7.50, after using nearly half of the brood in the spring to rear queens and build up weak colonies. I graded my honey into two grades, and sold it here in my home market for 15 and 12½ cents per pound. I produce comb honey alone, and have an apiary of 18 colonies of bees.

I get the "American Bee Journal" regularly, and enjoy reading it. I formerly took one of the other bee-papers, but I like the "American Bee Journal" so much better that I have never regretted making the change.

Hedgesville, West Va., Oct. 22.

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**Have You Read** page 707 yet?

## PROCEEDINGS

OF THE

Twenty-Fifth Annual Meeting

OF THE

NORTH AMERICAN

## BEE-KEEPERS' ASSOCIATION.

BY FRANK BENTON, SEC.

(Continued from page 697.)

## Apiculture in Germany.

Frank Benton—There is just one little point in Mr. Gravenhorst's essay that I would not like to have pass unnoticed. It has appeared from time to time in the German newspapers, and now and then in those printed in English. I refer to the statement that Dzierzon invented the movable-comb hive. It is nearly always put, as Mr. Gravenhorst has it, absolutely, as though Dzierzon were the *original* inventor of the first movable-comb hive, and it has been repeated so many times that every German bee-keeper seems to believe it—even many Americans credit it. Yet any one who takes the trouble to hunt up the records will find out that Dzierzon did not invent the first movable-comb hive, if, indeed, his boxes, with bars only, could be called movable-comb hives. The fact is, that movable-comb hives similar in principle were used in other parts of Europe long before Dzierzon was born, and we have authentic records, with illustrations of these hives, which were published in Paris more than 150 years ago. Among others who have left records of these hives, it is sufficient to mention Contardi, in 1768, and Abbe della Rocca in 1790. The latter had kept bees on the Greek island Syra, and both of these authors describe the wicker-work basket-hives "used by the ancient Greeks," and according to della Rocca, still in use in 1790 in Candia. Travelling in Greece, in 1883, I saw just such hives in use among the peasants living away back in the mountain regions—in fact, on Mt. Hymettus I purchased and manipulated some of these hives stocked with the native Greek bees. The same system has been followed there for many centuries. The peasants from whom I obtained these hives knew nothing of the bee-keeping of other countries, nor for that matter much of anything about the outside world. Many of them could neither

read nor write. Their hives were supplied with bars across the top, a comb being attached to each bar. Some of these bee-keepers knew how to make artificial swarms by removing part of the combs and bees to a new hive, cutting the side-attachments loose just as Dzierzon does with his hive to this day. Huber's leaf hive—essentially a movable-comb hive—appeared a half century before Dzierzon's hive. And in Russia, Propokovitsch, early in this century, invented and used a hive with frames in three stories, which was described and illustrated in Paris in 1841, thus seven years before the year assigned by Gravenhorst to Dzierzon's invention. Whether the latter knew of these inventions or not, I cannot say, but being a priest he knows Latin, of course, and might easily have gotten hold of these works in the French language, and acquainted himself with their contents. Dzierzon surely would not venture to claim the invention of frame hives, although others have done this for him. Nor do I know that he claims to have invented movable-combs. But others repeat the claim, and he says nothing regarding it, so that at last almost every bee-keeper in Germany, and even some over here, believe that such things did not exist until he invented them, much less that they were known centuries before he was born. He deserves a great deal of credit for making movable-comb hives more popular, and introducing more rational methods of keeping bees in Germany; and in referring to this matter let us have the thing correct, and give credit to whom credit is due.

Dr. Miller—The Germans swear by Dzierzon. They believe in that, and, as a matter of courtesy to them, and in the same spirit as we have acted toward them so far, I do not think it is our part to sit as censors on their views. They want to believe in Dzierzon, and it does not matter. It is none of our family quarrel at all; but as they want to believe in that thing, we ought to be courteous to them and let them live in happiness.

Mr. Benton—I do not agree with Dr. Miller at all. History is history, and when we quote it the truth must be told, no matter who is cut by it. I only offer this statement as a matter of fact. It is a record that cannot be disputed, and I stated it as a fact which I know, but without asking the Association to subscribe to it.

Dr. Miller—I don't see what the discussion of this essay will bring about. I want to know how to make enough

money to subscribe to the bee-papers published to-day.

F. H. Richardson—Mr. President, I think this essay that Mr. Benton has read, is a very good question for discussion.

Mr. Holtermann—We are not paying enough attention to the practical matters, I think; and by answering the questions, I think we will get more benefit.

Pres. Abbott—Gentlemen and ladies, I have here a letter from Mr. Doolittle, in which he asks a question. What is your pleasure regarding it?

Mr. Benton—I would suggest that Mr. Doolittle's question should go into the question-box.

#### The Kind of Bees.

John Schumacher—Mr. Doolittle asks if a colony in good condition would not do more work. I do not think that a good colony of bees in a poor season, or a poor colony of bees, one that is weak, will store much honey in a good season. That is a sure thing. A poor colony of bees will not store any honey, no matter what the season is, and no matter what kind of bees we have.

Dr. Miller—I do not say that a 5-banded, or a 3-banded, or a 43-banded bee might not be a better bee. A bee because it has more color may be better or it may be worse. Some may be the very best, or some may be the poorest, but I do not think we are likely to have better bees.

Mr. Benton—When this matter of the yellow bees came up, there was a point that I thought I would bring out, but a favorable opportunity to do so did not occur. I have seen yellow bees and yellow bees. I have seen some yellow bees from Cyprus that were great honey-gatherers. They have given us a record that no other bees have equalled. Of the yellow bees in this country I have seen some that I believed contained Cyprian blood, but those that contained Cyprian blood were energetic and excellent honey gatherers. I think there ought to be a distinction between those that are yellow sports and those which have been produced by crossing with Cyprians. Sports may be somewhat degenerated. I am not sure they are. I have not tried them sufficiently. I can state that the Cyprians are excellent honey-gatherers, and, properly handled, they can be manipulated as easily and rapidly as any 3-banded Italians.

Dr. Miller—I think a mistake has been made. We have gotten from Italy a race of bees, and we have found they

are valuable. I will illustrate that and try to get at it in another direction. Here is a breed of cattle, renowned for their milk. They have certain marks, and this marking of the breed is, well, say it is the whole of the head white. That is the mark of the pure breed. I take the notion that the cattle give more and better milk because they have the white head. I have a cow that has a white head and a white neck, and I think that a cow that is white all over would give a great deal more milk, and of better quality because she is white all over. I fool myself. When I vary from that mark of the pure breed I make a mistake, and when I vary from the 3-banded and take a 2-banded or a 5-banded, and I am going away from that breed, I fool myself. This 3-band business is simply a mark of a valuable race of bees. There may have been 2-banded bees, but so long as we know the 3-banded bees are good, that is the kind of bees we should have.

Adjourned until 7:30 p.m.

#### FIRST DAY—EVENING SESSION.

The Association met, pursuant to adjournment, at 7:30 p.m.

Pres. Abbott introduced Mayor Shepard, who, as chief executive of the city, extended in a brief and well-worded speech a cordial welcome to the Association, and an earnest wish that its work might prosper. This was responded to by Mr. George W. York in behalf of the United States, and Mr. R. F. Holtermann in behalf of Canada. Miss J. Graves and Mr. Hardman then favored the convention with some excellent vocal and instrumental music, after which the President introduced Mr. J. R. Rippey, Secretary of the Missouri State Board of Agriculture, whose remarks were followed by a vote of thanks to him for the part he has taken in securing a place for apiculture on the programmes of the farmers' institutes which are being held in the State.

A violin solo, by Prof. N. Bornholdt, followed, and was enthusiastically received, whereupon Pres. Abbott introduced Mr. T. B. Terry, of Ohio. This gentleman, after alluding to the nature of the institute work being done in Missouri, spoke in substance as follows:

#### Value of Clover-Growing.

I will give you a little bit of experience on one line, and that is the line which I am called on to speak about a great deal in this State, and that is in the direction of clover-growing, the amount of fer-



tility we can get in our land from clover growing systematically. There is not enough attention paid to the systematic rotation of growing crops, and so we are trying to urge this rotation of crop-growing so as to bring in this clover crop once in three or five years. We want to bring that in, in order that we may bring in the crop that brings in money, so that the land will grow more bushels to the acre, and grow it cheaper. Now, if I was talking to an audience of



Vice-President L. D. Stilson.

farmers, I would tell that we can grow more tons of hay where it is grown in rotation; and it is a fact. We can grow about  $\frac{1}{2}$  more hay in rotation, and it is worth more. Do you not think that any man who is told these things, and can see them for himself, would not go into the systematic growing of clover?

An important point in this connection is, where does the clover get this excess of fertility? From the air and from the subsoil. It gets the nitrogen from the air, and the farmers by following the systematic rotation of growing clover can get from the air all the nitrogen they need for practical purposes as long as time lasts. It is only within a short time that we have been able to prove this. The clover gets the nitrogen from the air, and minerals from the subsoil. It has been proved by science that the clover can get the minerals from the soil

below, and store it in the soil above. That is why we call it a renovating crop. We are trying to urge the farmers to grow clover and not timothy. It will yield about  $\frac{1}{2}$  more of a crop than timothy, and is worth about  $\frac{1}{2}$  more.

I want to give you a little experience right on this line to illustrate this point—not to brag about what I have done, but to show you what I have been preaching can be carried out in practice. Right by the side of one of our best fields is a piece of land belonging to a neighbor. Originally it belonged to our farm. It was cleared at the same time, and all belonged to one man. The character of the soil is identical—the same in both fields. My neighbor has been farming on this land for 25 years, but somewhat differently from what we have on ours. The rotation practiced is the same in both cases, with the single exception that for the past quarter of a century my neighbor has grown timothy in place of clover, while we have grown clover. Timothy feeds on the soil, and is not what might be called a renovating crop. Every ounce taken out makes the soil so much poorer, while clover makes it richer. I said that our rotations were the same—ours, clover, potatoes and wheat, while his was timothy, potatoes and wheat. We have been growing this for a good many years. This year both of us put wheat in the fields. Last season we both had potatoes. The year before that we had clover on our field while our neighbor had timothy. The neighbor had timothy with a little clover scattered through it. This was in 1892. We cut the first crop of hay, and we certainly had as many pounds as our neighbor. The second crop of clover grown that season we allowed to go back to the land. It was broken down on the surface to lie there and shade the ground and furnish a honey crop. Our neighbor had no second crop to amount to anything. Timothy does not give a second crop. We had no manure or fertilizer, only the clover roots and tops, and that cost us nothing. We had as much hay as our neighbor. Our neighbor put on a heavy coat of manure.

There was a little rivalry between us, and when I got home in the spring and saw the amount of manure he had put on, my heart sunk away down. He never had beaten us in 25 years, and I did not want him to. We both put in potatoes, beginning to plant the same day by mutual consent, and they were both put in by machinery. There was no difference in it at all except in the fertilization of the land. When it came digging

time in the fall of 1893, we had 167 bushels to the acre. You will remember that it was a very dry year, and we did not have a large crop at all. Our neighbor had 100 bushels to the acre on the average. We sold our crop for 75 cents per bushel and our neighbor did the same. There was a difference of \$50.00 to the acre in favor of the clover-fed land. We dug our potatoes at the same time and prepared our land. We put in our wheat, and my neighbor threshed first and he had 42 bushels to the acre. That was a big yield. I never had had over 40 bushels to the acre, and I thought that he had beat me. However, when we came to thresh, I gave my neighbor the job of measuring the grain so that he might know just what I had, and when the separator ran to 42 bushels to the acre it did not stop, but ran right along and kept on until it got to 50 bushels to the acre, and it was wheat that weighed 65½ pounds to the bushel. I was pleased, not only because I had a good crop, but because I had proved that my way was right. I had worked hard on that land, harder than I otherwise would.

We went on a farm 25 years ago that was so run down by poor cropping—by careless cropping, I mean, that it would not go in the best years perhaps over 8 bushels of wheat to the acre. It has paid for itself, and has been brought up from 8 to 48 bushels to the acre. We have one field that will not produce as much as that, but the yield there was 45 bushels to the acre, so that forms an average of 47%. I am not the only man that believes in this, but there are thousands who are doing it, and there ought to be many and many thousands more who should do it, and that is the reason why I am willing to leave my home, and be uncomfortable oftentimes, in order that I may impress this fact on my brother farmers throughout the land.

T. B. TERRY.

A recitation and a song by Dr. Miller closed the evening session of the first day.

(To be continued.)

**"Foul Brood: Its Natural History and Rational Treatment,"** is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for \$1.15.

## OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building,

CHICAGO, ILL.

### Cancers—or Supposed Ones.

The very name brings terror to many hearts! But let your minds find relief in the fact that not one in fifty of the so-called cancers are anything of the kind. There is a class of persons, abundant on earth, whose seeming great joy is to inspire fear and distress in the hearts of the uninformed. Such persons are ever ready to pronounce a swelling or a sore, or even certain debilities cancers, on their sheerest guessing. Especially are swellings of the breasts, whether painful or not, at once feared as being cancers, when, in point of fact, they are nothing of the sort; but in the fear that they may be, resort is had to all sorts of treatments—liniments, plasters, poultices, besides big doses of all the patent nostrums that can be heard of—the very worst thing one can possibly do—measures most likely to develop a cancerous tendency, if possible.

"Well, then, what shall I do?" asks an excitable little woman. *Let the swelling alone!* Nine chances in ten it will entirely disappear if you simply wear your clothing so that the swollen place will not be rubbed and chafed by it. And don't stuff a lot of cotton or other material to enhance the form; it keeps the parts unnaturally warm, and so irritates.

Corsets are very frequently the cause of swellings of the breasts. The stiff upper edge of them often accidentally punch into the breast, and so bruise the inside flesh as to produce painful swelling, usually in the form of a somewhat hard knot. Well, you just let it alone—don't rub it or squeeze it, or poultice it. A piece of oiled-silk over the spot is all you need, and that should not be necessary, if your dress don't rub against it. Keep a cool head on your shoulders, and stop thinking and talking about it, and the probability is that the swelling will be all gone almost before you know it.

Grandma Jones was so certain she smelled smoke, that she got up, lighted a candle, and began to investigate. She accidentally ignited some rubbish in the cellar, which quickly blazed up, and—sure enough! the house burned down! If you feel you want some one to decide what the matter really is, go see your doctor—and if he laughs at your unnecessary fears, don't get vexed at him, and think he's a "heartless thing." But instead, take courage and dismiss the subject from your mind.



Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

#### Dr. Miller's Case of "Gastralgia."

MR. EDITOR:—I am a little afraid of Dr. Miller, and so I send this to you. After reading what W. F. Haines has to say on page 647, I would suggest that perhaps Dr. Miller's cistern may have a case of "Gastralgia," and "got it bad." Perhaps he had better quarantine it, to be safe. He can, if he likes, follow the treatment laid down by Mr. Haines, which is very effective. But I believe if he will submerge the lime in "aqua pure" when he has it in the cistern, that it will germinate gas enough to kill all the 'crobes on his whole 35 acres. But perhaps to make certain sure, he had better give it a new location.

I hope you see the point, Mr. Editor, and I think he will, for I see his "picter" in "Bees and Honey," and think he knows a good thing when he sees it.

It is now 5:30 a.m., and I must hustle and get to husking corn. NEDDY.

Deer Park, Ill.

#### Short Honey Crop.

I have 7 colonies. The honey crop in our locality was short, owing to the continued drouth, white clover being about the only dependence for the bees. They have stored no surplus, but have about 20 pounds of honey per colony for winter. C. H. STORM.

Reynoldsville, Ill., Nov. 24.

#### Printer's View of the "Bee Journal."

By stepping far enough away to get a sort of "bird's-eye view" of the whole "American Bee Journal," the "Contributions" department appears as bread and potatoes, and the other smaller departments as spiced foods. Originally these departments were comprised in that of "Contributions," but, by going through the editorial extractor, which

has a briskly moving reel, the departments result, enabling the reader to more easily secure the part he desires.

Thus some read the "Editorial" first, some "Sunny Southland," and others the "Letter Box"—pie and cake first, and substantials last, and *vice versa*—a good deal according to their "bringing up"—but the one as essential as the other to complete a hearty intellectual meal. Time was when it was relishable all jumbled together, so to speak, because they were very glad to get it in any shape or style, just as our oldest relatives remember before desserts were invented, and the food placed in a single dish on the center of a wide board, and tallow candles were a luxury. But in the passing age, what the consumer takes must contain spice and electricity to be appreciated.

Now, if there were only "Contributions" it would be far better the old way; but, with the numerous accompanying departments, it would puzzle the casual observer to distinguish the principal or original; and it also restores to the main department its relatively prominent and broader aspect. Thus I look upon the recent change in the "make-up" of the "Contribution" department as a systematic, consistent, and demanded departure, and as an altogether "nice" perception of the printer's art, and a grand improvement of the "Old Reliable." C. W. DAYTON.

Downey, Calif.

#### An Experience With Bees.

On May 30, 1893, I received a colony of Italian bees from South Carolina that I had purchased of an Ohio dealer. They were five days en route, and arrived with empty combs. Poplar was just coming in bloom. In a short time their hive was full of brood and honey, and 17 pounds of honey was stored in the sections. I bought a queen of a Texas breeder, and divided the bees, and in a couple of weeks the old colony sent out a swarm. As the severe drouth which now set in cut short the honey crop, I had the three colonies to feed for winter.

My neighbor had 7 colonies of black bees, and my Italians began robbing a very weak colony of his, which wound up with a general pillage of nearly all his hives. To save his bees, I moved mine two miles into the country, where they behaved all right until March, 1894, when they began robbing a neighbor's bees, who notified me of the case,



I brought mine back home. Honey coming in from the field, the bees never robbed but one day after this.

By dividing and saving one swarm on July 19, I increased from 3 colonies to 8. The colony of bees with the queen I got from Texas never swarmed, but in May I took four frames of brood from them to make a start with a Carniolan queen. Though the colony was too weak to gather any surplus from poplar when it came in bloom, they soon outstripped the others, and stored 100 pounds of honey in the sections before the season was over. From my 3 colonies of bees, spring count, I received 160 pounds of surplus honey and an increase of 5 colonies. I sold one colony for \$6.00.

In September I moved from Tunnelton to Belington—60 miles—by rail. The car was too warm, and some of the combs melted down, but I managed to save 5 colonies out of 7. I have made mistakes, but the bees have been profitable, and they require less time in a year than poultry, where one keeps but a few colonies. W. E. DEAN.

Belington, W. Va., Nov. 6.

#### In Good Condition for Winter.

It has been a rather poor season for bees here this year. I had 45 colonies, spring count, increased to 54, and secured 1,300 pounds of extracted honey and 350 pounds of comb honey. My bees are in good condition for winter. Most of the honey here this season was dark. I think the 8-frame Langstroth hive is large enough for my location. Prices for honey are rather low here. CHAS. B. ALLEN.

Central Square, N. Y., Nov. 22.

#### A Good Word for Yellow Bees.

I have read with considerable interest the experience of different ones in regard to the relative merits of the three and five banded bees. I have kept from 50 to 60 colonies of Italians and hybrids, and worked them for section honey for three years, and the yellowest bees I have gave me the most surplus every year—from 24 to 72 sections. I have a queen in my apiary now that I got for 75 cents, and her bees have stored 96 finished sections this year, and it has been the poorest of the three years that I have kept bees.

I want to say I never reared a queen for sale, and don't expect to. I simply buy from one to a half dozen queens

every year, to get new blood. It is with some misgiving that I write, after seeing the report from the North American convention, for they there surely gave the yellow bees a "black eye." How my experience should be so different from others is what bothers me, but I suppose that is one of the things I have not found out yet. The five-banded bees that I have are the gentlest bees I have, but I believe they cap their honey a little darker than some of the darker bees.

Success to the "American Bee Journal" I would not keep bees without it.

J. D. PROSISE.

Abbott, Tex., Nov. 12.

#### Very Dry Season.

I have 9 colonies in the cellar, put in Nov. 6. Two of them were wintered last winter in box-hives, I transferred them in the spring, got one natural swarm, and made two by dividing. I purchased a 3-banded Italian queen on August 13, and introduced her successfully. Sept. 20 I purchased 4 queens, and lost 2 in introducing. I purchased 2 colonies from a neighbor and drummed out two more for the bees, which we will try to winter on candy. I have them in Simplicity hives, on Hoffman frames. The surplus was 60 pounds. The season was very dry.

GEO. STOUT.

Champlin, Minn., Nov. 24.

#### The Season of 1894, Etc.

It is now Nov. 19, and looking backward it seems such a short time since the dawn of spring, with all aglow for honey and prosperity; but how often our prospects and plans are blasted, and soon the complaints of people are heard in our streets.

As regards my honey crop, and the management of my apiary the past season, I may say that I commenced with 34 colonies, one colony being so reduced in numbers that it took all summer to build it up. Another had lost its queen, and another I used for queen-rearing, etc. I started with 30 full colonies, fed near 200 pounds of sugar, and soon the fruit-bloom came and went, cold and wet, so the bees gathered but little honey. How anxious I was to see the clover come, and on May 10 the first white clover made its appearance. Soon the joyful sound was heard in the apiary, for it was apparent the bees had found a little of the nectar. Then the



red clover came, and on July 1 came basswood, and swarming going on. I let them go; only when they swarmed I put 10 in new hives, and the other swarms I put back.

I secured 800 pounds of very nice comb honey, 100 pounds of extracted, and about 20 swarms. I now have 150 colonies. I extracted but little from the body of the hive. I use both the 10 and 8 frame hives. I tell you, when I have a swarm out of the 10-frame hive, it seems like business.

My bees have plenty of stores, I think, for winter. I left them almost all they had in the body of the hive.

On July 20 the scene changed. The drouth had come upon us, and but little honey was gathered after that date. On October 1 frost came, with the mercury at 38°, and on Oct. 14 ice formed  $\frac{1}{4}$  of an inch thick, at 30°. The coldest morning was on Nov. 11-12. A heavy snowstorm occurred, on Nov. 9, some 6 inches deep of snow. I take the temperature near sunrise, and direction of wind, each morning in the year, in this the 43rd degree of latitude.

I use a feeder of my own get up, so constructed that when cool in spring no draft can strike the bees; no daubing, no disturbing the bees, all you have to do is to pour the syrup in. While the bees are in one part you can feed in the other.

I want to say to Dr. Miller, if he is troubled with impure water in his cistern, to put in a chain pump, and the trouble will soon be over. I have had one in my cistern for 19 years, and it is good for a number of years yet.

I think that any one who keeps bees should take the "American Bee Journal," or some other good, reliable bee-paper, and all the standard books published on the subject in America.

Ionla, Mich.

JACOB MOORE.

### Two Laying Queens in a Hive.

I had an experience last season which seems to confirm the idea that two queens may live and work peacefully together. I got a very nice Italian queen, last spring, and introduced her to a colony after having removed their queen. I examined them about two weeks afterwards, and found the queen all right, but found no grubs, queen-cells nor eggs. I closed the hive and in about two weeks again examined them, and on the second frame I took out, I found a very fine, fertilized hybrid queen laying, which astonished me, for I could

not imagine where she came from, neither do I know to this day. I put her back, and took out another frame, and found my Italian queen all right, and laying; so I had two laying queens in one hive, which of course I thought would not do, so I took out the hybrid queen and made a nucleus with her, and she proved to be a number one queen.

I have just finished packing my 32 colonies for winter. I winter them out-of-doors, well packed with leaves, and have lost none for the last four winters.

Our last season was almost a failure in the matter of honey in the greater part of this county, although in some parts there was a good crop of honey gathered.

WM. B. MCCORMICK.

Uniontown, Pa., Nov. 14.

### Italians Stronger than Blacks.

During the month of September I saw Italian bees on the flowers by the roadside. Knowing there were no apiaries of Italians in the vicinity, I supposed a stray swarm had come into the neighborhood. A few days after, I set them to work and they took a straight line for an apiary which was fully half a mile farther than I had ever lined black bees. Italians are stronger every way than black bees. If those who keep them would allow them to rear all the drones they are inclined to rear, the same as box-hive bee-keepers allow their blacks, there would not be a black bee left in the country in 10 years.

J. H. ANDRE.

Lockwood, N. Y., Nov. 19.

### Prefers the 10-Frame Hive.

I like the "American Bee Journal," and the information I have received from it has been worth many times a year's subscription.

The past season was poor with me, for honey—too dry. I secured 2,500 pounds of comb honey, principally basswood, from 100 colonies, spring count. I will put into winter 116 colonies in prime condition. About  $\frac{1}{4}$  of my bees are in 10-frame Simplicity hives, and half in 8-frame dovetail hives. I winter them on the summer stands, and a part of them in single-wall hives. My loss in wintering in the last five years has averaged about one per cent. I can produce more bees and honey in the 10-frame Langstroth hives than I can in the 8-frame hives. I have tried each kind, side by side, and now I am discarding the 8-frame size.

C. S. YOUNKIN.

Confluence, Pa., Nov. 26.

**Very Short Honey Crop.**

The honey crop has been almost an entire failure here this season. My crop was 100 pounds of clover honey from 3 colonies.

I can't see how I could get along without the "American Bee Journal."

GEO. H. CURL.

Jameson, Mo., Nov. 17.

**Sample Copies** of the "American Bee Journal" will be mailed free to all who ask for them. The next three or four months will be just the time for getting new subscribers, and if any of our friends can use sample copies among their bee-keeping neighbors, in order to get them as new subscribers, we will be glad to mail the samples, if the names and addresses are sent to us. Better educated bee-keepers will mean better things for all.

**Two Bound Volumes** of the "American Bee Journal" for 1891 we have for sale, by express, for \$2.00, or by mail for \$2.30. They are bound in good board covers with leather backs, gilt-lettered. The first one who sends the price, will have the books.

**Have You Read** the wonderful Premium offers on page 707?

**List of Honey and Beeswax Dealers,**

Most of whom Quote in this Journal.

**Chicago, Ills.**

J. A. LAMON, 43 South Water St.  
R. A. BURNETT & Co., 163 South Water Street.

**New York, N. Y.**

F. I. SAGE & SON, 183 Reade Street.  
HILDRETH BROS. & SEGELKEN,  
28 & 30 West Broadway.  
CHAS. ISRAEL & BROS., 110 Hudson St.  
I. J. STRINGHAM, 103 Park Place.  
FRANCIS H. LEGGETT & Co., 128 Franklin St.

**Kansas City, Mo.**

HAMBLIN & BEARSS, 514 Walnut Street.  
CLEMOMS-MASON COM. Co., 423 Walnut St.

**Albany, N. Y.**

H. R. WRIGHT, 326 & 328 Broadway.

**Buffalo, N. Y.**

BATTERSON & Co., 167 & 169 Scott St.

**Hamilton, Ills.**

CHAS. DADANT & SON.

**Cincinnati, Ohio.**

C. F. MUTH & SON, cor. Freeman & Central avs.

**Convention Notices.**

**WISCONSIN.**—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895.  
Madison, Wis. J. W. VANCE, Cor. Sec.

**COLORADO.**—The 15th annual meeting of the Colorado State Bee-Keepers' Association will be held on Monday and Tuesday, Jan. 21 and 22, 1895, in Denver.  
H. KNIGHT, Sec.  
Littleton, Colo.

**ONTARIO, CANADA.**—The annual meeting of the Ontario Bee-Keepers' Association will be held at Stratford, Jan. 22, 23 and 24, 1895. All bee-keepers are cordially invited to attend.  
W. COUSE, Sec.  
Stratfordville, Ont.

**PENNSYLVANIA.**—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p.m. All interested send for program.  
C. S. PIZER, Sec.  
Franklin, Pa.

**ILLINOIS.**—The next annual meeting of the Northern Illinois Bee-Keepers' Association will be held on Dec. 18 and 19, 1894, in the Supervisor's room of the Court House, in Rockford, Ill. All interested are invited to attend.  
B. KENNEDY, Sec.  
New Milford, Ill.

**VERMONT.**—The next annual convention of the Vermont Bee-Keepers' Association will be held in Middlebury, Vt., on Jan. 30 and 31, 1895. Programs will be prepared and mailed later. Let every Vermont bee-keeper begin now to prepare to attend, and all those who can reach Middlebury, whether you live in Vermont or not, we want you to come.  
Barre, Vt. H. W. SCOTT, Sec.

**MICHIGAN.**—The Michigan State Bee-Keepers' Association will hold its annual meeting Wednesday and Thursday, Jan. 2 and 3, 1895, in the city of Detroit, at the Perkins Hotel, cor. of Cass and Grand River Avenues. Rates, \$1.25 and \$1.50 per day. The former rate if two occupy one room. This will be at a time when railroad rates will probably be one-half fare.  
W. Z. HUTCHINSON, Sec.  
Flint, Mich.

**INDIANA.**—The Indiana State Bee-Keepers' Association will hold its fifteenth annual meeting at the State House, Indianapolis, on Jan. 9, 1895. There will be three sessions—morning, afternoon and evening. Several other associations will convene here at the same time, thus securing reduced rate of 1½ fare for the round trip, but a certificate must be asked for when purchasing your ticket. Programme will be issued in December.

WALTER S. POWDER, Pres.

Indianapolis, Ind.

**IOWA.**—The Eastern Iowa Bee-Keepers' Association will hold their annual meeting at Anamosa, in the court room, on Dec. 26 and 27. There will be reduced rates on all railroads at this time. This will give all a good chance to attend the bee-meeting, and an opportunity to look through the State prison, which is located at Anamosa. Let all the bee-keepers within reach take advantage of this grand opportunity. Come with the intention of having a grand, good time. Let each bring with them some fixture or fixtures that he or she thinks of value in the apiary, and some important question for discussion.

Welton, Iowa. FRANK COVERDALE, Sec

## Honey & Beeswax Market Quotations

CHICAGO, ILL., Oct. 25.—White clover honey continues to bring 15c. The receipts are about keeping pace with the demand. The quality is very satisfactory as a rule, being heavy and of good flavor. Extracted continues to sell chiefly at 62½c., according to color, flavor and style of package. Beeswax scarce and in good demand at 27½28c.

R. A. B. & Co.

NEW YORK, N. Y., Oct. 25.—Comb honey arrives quite freely, our receipts up to date numbering 10,119 crates. The demand is fair. We quote: Fancy white, 1-lbs., 14c.; fair white, 12c.; buckwheat, 10c.; 2-lbs., 12½c. less, according to quality. The market for extracted is dull, with plenty of stock. We quote: Basswood and white clover, 62½c.; Southern, 50½55c. a gallon. Beeswax scarce and in good demand at 29c.

H. B. & S.

NEW YORK, N. Y., Nov. 10.—The market for comb and extracted honey is good, and the supply equals the demand. Fancy clover and buckwheat sells best; off grades are not quite as salable; and 2-pound sections are little called for. We quote as follows: 1-pound fancy clover, 13½14c.; 2-pound, 12½13c.; 1-pound white, 12½12½c.; 2-pound, 12c.; 1-pound fair, 10½11c.; 2-pound, 10½11c.; 1-pound buckwheat, 10½11c.; 2-pound, 9½10c. Extracted, clover and basswood, 62½c.; buckwheat, 52½54c.; Southern, 50½60c. per gallon. Beeswax, scarce and in good demand at 29½30c.

C. I. & B.

CINCINNATI, O., Nov. 19.—Demand is good for choice white comb honey at 14½16c. Extracted is in fair demand at 42½c., with a fair supply.

Beeswax is in good demand at 22½27c. for good to choice yellow. Supply scant.

C. F. M. & S.

KANSAS CITY, Mo., Oct. 4.—The receipt of comb honey in this market so far has not been very large, and demand is very good. We quote: No. 1 white, 1-lbs., 15c.; No. 2 white, 13½14c.; No. 1 amber, 14c.; No. 2 amber, 10½12c. Extracted, white, 6½7c.; amber, 5½6½c. Beeswax, 25c.

C. M. C. Co.

CHICAGO, ILL., Oct. 18.—We quote: Fancy white comb honey, 1-lbs., 15c.; No. 2 white, 13c.; buckwheat, 10c. With cooler weather, demand improving, and our stock on hand at the present time extremely light. Extracted, 5½67c., depending upon quality and style of package. Beeswax, 28c.

S. T. F. & Co.

ALBANY, N. Y., Sept. 21.—Honey in better demand, especially the high grades of white comb honey. We quote: No. 1 white, 14½15c.; No. 2 white, 13½14c.; Mixed white, 11½12c.; No. 1 buckwheat, 12½12½c.; No. 2 buckwheat, 11½11½c.; common, 10½11c. Extracted, white (Northern), 7½8c.; amber, 6½c.; buckwheat, 5½6c. Beeswax, 27½29c. Do not look for much of any change in these prices, and advise now to have honey on the market as early as possible for best prices.

H. R. W.

BUFFALO, N. Y., Oct. 17.—The demand is improved, fancy moving somewhat better at 14½15c.; choice, 12½13c.; buckwheat and other, 9½10c.

B. & Co.

KANSAS CITY, Mo., Sept. 8.—The supply of comb and extracted is very light with only fair demand. We quote: Fancy white, 15½16c.; amber, 11½12c.; dark, 10c. Extracted, white, 6½7c.; amber, 6½6½c.; dark, 4½5½c. Beeswax, 22c.

H. & B.

NEW YORK, N. Y., Nov. 24.—The receipts of comb honey have been very large and exceed those of former years by far. The demand has not been very active of late and there are no signs of improvement. The supply is accumulating and the prices show a downward tendency. We quote: Fancy white, 1-lbs., 13½14c.; fair white, 11½12c.; buckwheat, 10c. Two-pound sections are in very light demand and sell at from 12½c. a pound less. The market on extracted is quiet, with plenty of supply of all kinds. We quote: White clover and basswood, 6c.; Southern, 50½55c. per gal. Beeswax is firm and in good demand at 30½31c.

H. B. & S.

CHICAGO, ILL., Nov. 27.—Up to the present the sales on honey have met with our expectations. We have received considerably more honey than we figured on handling, owing to the short crop report, and we think the early shippers reaped the benefit. However, we are now getting the average price, viz.: Fancy, 15c.; white, No. 1, 14½13c. Extracted, 62½7c. Beeswax, 28½29c.

J. A. L.

**Profitable Bee-Keeping**, by Mrs Atchley, will continue for some time in her department of the BEE JOURNAL, possibly each alternate week. Until further notice we can furnish the back numbers from May 1st, beginning with her "Lessons," to new subscribers who pay \$1.00 for a year's subscription to the BEE JOURNAL—that is, we can commence their year with the number having the first lesson, if they so desire.

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